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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,782	11/17/2003	Anthony M. Cialone	17180	2433

7590 10/01/2007  
Leopold Presser  
SCULLY, SCOTT, MURHY & PRESSER  
400 Garden City Plaza  
Garden City, NY 11530

EXAMINER
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ROSENBAUM, MARK

ART UNIT	PAPER NUMBER
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3725

MAIL DATE	DELIVERY MODE
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10/01/2007

PAPER.

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/714,782

Applicant(s)

CIALONE ET AL.

Examiner

Mark Rosenbaum

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-18 and 20-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-7,10-18,20-23,26-28,32-45 is/are rejected.
- 7) ☒ Claim(s) 8,9,24,25 and 29-31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Allowable Subject Matter***

Claims 8,9,24,25,29-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Claim Rejections - 35 USC § 103***

Claims 1,2,6,7,10-18,20-23,26-28,32-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of applicants' admitted prior art (APA). This patent discloses a process and apparatus for making crumb and powder rubber including removing ferrous metal, removing fiber, initially chilling the remaining stream of material, grinding the stream, and classifying the stream. Chen uses cryogenic gas formed in the initial chilling step to cool subsequent steps, but makes no mention of recycling the cryogenic gas into the initial cooling device. This results in inefficient cooling. On page 8, third paragraph of applicants' specification, it is stated that 'As those skilled in the art are aware, cooling efficiency is maximized by recycling cold vaporized nitrogen gas, which results from the heating of the nitrogen liquid during the chilling of the rubber particles, into the inlet end of vessel 13...more efficient the final chilling'. Thus, APA states that the cryogenic gas is recycled into the original chilling for more efficient chilling. In order to maximize chilling efficiency, it would have been obvious for one of ordinary skill in the art to modify Chen by recycling the cryogenic gas to the initial cooling, taught to be desirable by APA. The remaining limitations would then have been obvious design choices by one skilled in the art. For example,

screening after any particular step would have been obvious if a desired material of a particular particle size was needed.

***Response to Arguments***

Applicant's arguments filed 9/5/07 concerning the above rejected claims have been fully considered but they are not persuasive. As noted above, APA discloses the recycling of the cryogenic gas. If the examiner has misinterpreted this part of the specification, applicants should fully explain why.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Rosenbaum whose telephone number is 571-272-4523. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read "Mark Rosenbaum". The signature is fluid and cursive, with a long horizontal stroke at the end.

Mark Rosenbaum  
Primary Examiner  
Art Unit 3725

MR